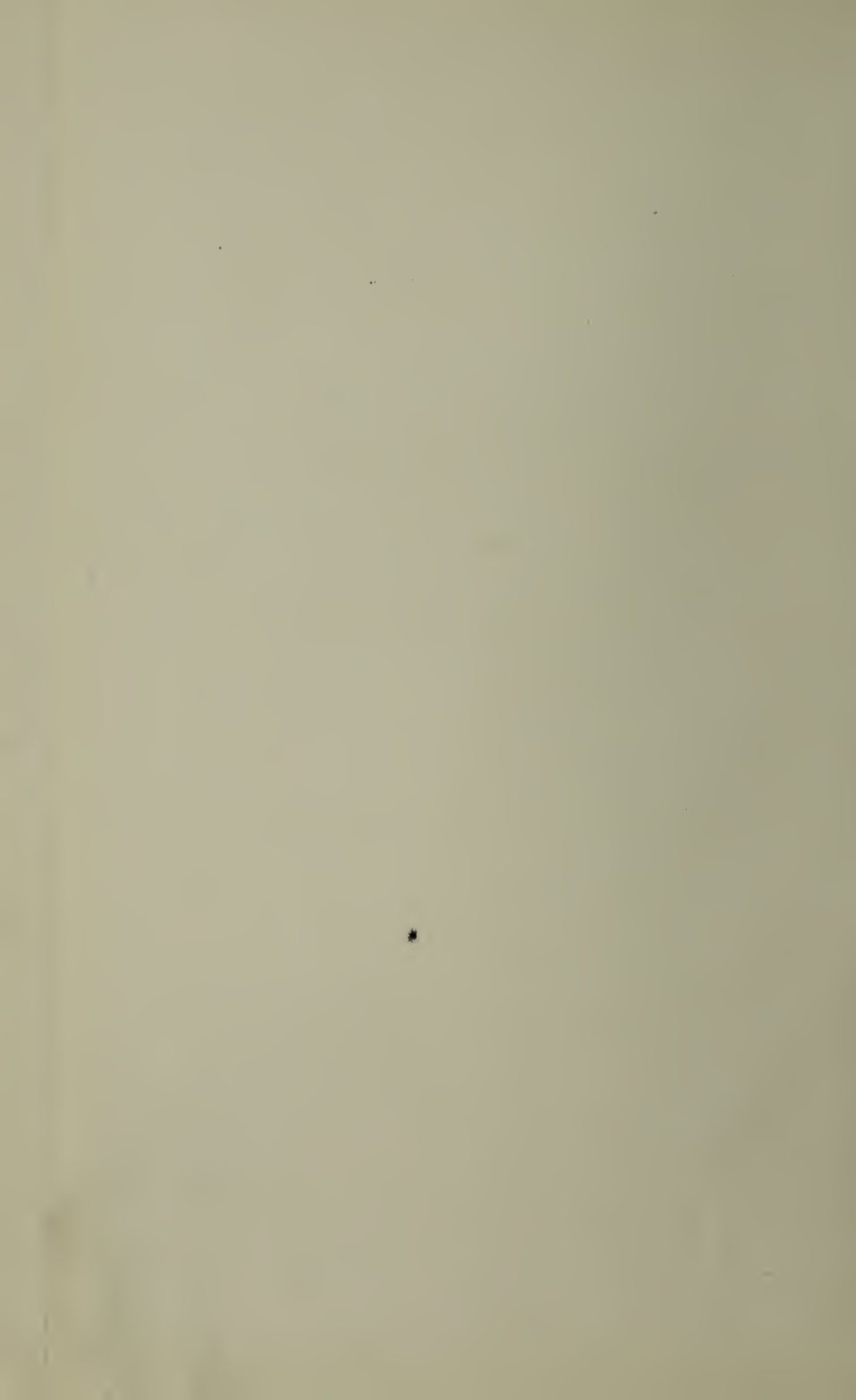


95.





BOROUGH OF HARTLEPOOL.

REPORT
OF THE
MEDICAL OFFICER OF HEALTH
WITH THE
REPORT OF THE
SCHOOL MEDICAL OFFICER,
FOR THE YEAR 1914,
BY
GEORGE JUBB, M.D., D.P.H.

Hartlepool :
F. W. MASON, PRINTER, HIGH STREET.
1915.

STATISTICAL MEMORANDA FOR 1914.

AREA OF THE BOROUGH ... 972 $\frac{1}{2}$ ACRES.

Estimated Population	...	...	...	21,130
Birth-rate	...	...	30·8	per thousand
Death-rate	...	...	18·1	„ „
Infantile Mortality	...	...	130·5	per 1000 births
Zymotic Death-rate	...	...	0·9	per thousand
Scarlet Fever Death-rate	...	...	Nil	
Diphtheria	„ „	...	0·04	„ „
Measles	„ „	...	Nil	
Phthisis	„ „	...	0·8	„ „
Census Population, 1911	...	...	...	20,956

LEGAL SUMMARY.

LOCAL ACTS.

Borough Extension Acts, 1883-1897.

GENERAL ACTS.

Public Health Act, 1875

Dairies, Cowsheds and Milkshops Order, 1885

Infectious Diseases Notification Act, 1889

Housing and Town Planning Act, 1909

ADOPTED ACTS.

Public Libraries Act	...	...	...	Adopted 1891
Public Health (Amendment) Act, 1907	...	...	„	1908
Notification of Births Act, 1907	...	...	„	1912

Borough of Hartlepool.

SANITARY COMMITTEE.

Chairman : COUNCILLOR GIBB, M.B.

Vice-Chairman : COUNCILLOR BRICKMAN.

ALDERMAN HARRISON

COUNCILLOR ATKINSON	
„ BARNFATHER	
„ CHARLTON	
„ DAVISON	
„ EVERTON	
„ FIRBY	
„ J. B. GRAHAM	

ALDERMAN TATE

COUNCILLOR HUBBICK	
„ NIELSON	
„ SAMPLE	
„ WATSON	
„ C. TOSHACH	
„ WATSON	
„ WILLIAMSON	

Medical Officer of Health and School Medical Officer :

GEORGE JUBB, M.D. (GLASG.), D.P.H. (OXON.)

Sanitary Inspector and Inspector under the Food and Drugs Act :

JOSEPH CHARLTON, A.R.S.I., R.C.P.

Assistant Sanitary Inspector, Health Visitor and School Nurse :

ALICE HAYDEN, C.R.S.I., TRAINED NURSE.

PUBLIC HEALTH DEPARTMENT,
BOROUGH BUILDINGS,
HARTLEPOOL,

1st February, 1915.

To the Town Council of the Borough of Hartlepool.

Gentlemen,

I beg to present the Annual Report for 1914.

The year has been an eventful and historical one for the Borough, in consequence of the bombardment by German warships on 16th December, which caused the loss of many precious lives—men, women and children, as well as the destruction of valuable property. The immediate result, as far as the public health figures are concerned, was to give the unexampled death rate of 40·2 per thousand for the month of December. There is no doubt that other more remote effects will follow this tragic occurrence, but it is too early to say exactly what these results will be. It is sufficient to realize that a community, and more especially the weaker and feebler members, do not recover easily from such a shock.

The year has seen the completion of the details of the Improvement Scheme for the Cleveland Street area. It is hoped that a Local Government Board Inquiry will be held shortly, so that the Scheme can be put into execution without further delay.

I desire to express my thanks to the Committee for their kindness and consideration to me since I assumed office on 6th November. I have also to thank the various Borough officials for their ready help and co-operation.

I am,

Your obedient servant,

GEORGE JUBB.

Medical Officer of Health's Report, 1914.

THE GENERAL SANITARY CIRCUMSTANCES OF THE TOWN.

Water Supply.

There is a constant and gravitational water supply provided for both the town and the surrounding districts by the Hartlepool Gas and Water Company. A daily supply of 42 gallons per head is available, of which 26 gallons are for domestic purposes and 16 gallons for trade purposes.

The supply for domestic purposes is obtained by a series of borings spread over an area of twelve acres in the neighbourhood of Middleton Road, West Hartlepool. These borings are each six inches in diameter and are made in the limestone to the depth of about two hundred feet, and owing to the geological conditions which produce an artesian well being present, the water rises to within twenty-five feet of the surface, at this level the borings are connected by a channel which takes the water to a central well. From this well the water is pumped up into tanks one hundred and thirty feet above the ground so that the necessary fall is obtained to enable the water to gravitate throughout the whole district supplied. The supply is abundant as all the bores in existence are not in use, and the supply from those in existence can be increased by pumping.

The supply for the rural neighbourhood is pumped to an open reservoir at Naisberry, and is distributed from there to the farms, cottages, &c. in the neighbourhood.

Two samples of the water were taken during the year and analysed by the Borough Analyst. The results were practically the same in both instances and were in harmony with former analysis. The following is the detailed analysis of a sample :—

" 24th November, 1914.

Total solids	...	...	55.55 grains per gallon
Chlorine	...	...	5.94 " "
Saline ammonia	...	...	Nil
Albuminoid ammonia	...	...	.004 " "
Oxygen required to oxidise			
all organic matter	...	...	.034 " "
Hardness before boiling	...	...	35 degrees Clarke's scale
" after " "	...	...	30 " "

This water is very clear and bright, and is without smell, colour, or sediment. The quantity of Chlorine is attributable to the neighbourhood of saline springs, or to slight infiltration of the sea. The water is very free from any organic impurity, and is in my opinion a good and safe town supply."

The derivation of the water from a great depth in the limestone guarantees its original freedom from organic pollution, and the method of its distribution is such that subsequent contamination on its way to the consumer is unlikely or impossible.

The water contains large amounts of lime, magnesium and sodium chlorides, characteristic of the geological formation from which it is derived, so that, as is shown in the above analysis, it has a high degree of both temporary and permanent hardness. This excessive hardness of the water is very objectionable both for works and houses, and both have to take measures to overcome this difficulty.

For household use most houses depend upon a supply of rain water, collected from the roofs and stored ; but owing to the various industries carried on in the town, the rain water is inevitably discoloured and polluted by atmospheric impurities.

For trade purposes a supply of soft water is derived from a watershed area of nearly seven thousand acres, which lies on the high ground about sixteen miles west of the town. From this spot the water is collected into reservoirs capable of holding four hundred million gallons, and from the reservoirs it passes by pipes into the town.

Seeing that the domestic supply is so hard it is quite reasonable to suggest that there ought to be some reduction of this excessive hardness.

The hardness of the water is objectionable, not only because it forms fur in domestic boilers and scaling in pipes, but also because it uses up a great deal of soap before a lather can be formed and this militates strongly against personal cleanliness. This is very important, because here there is an excessive amount of smoke and coal dust in the air, and to aggravate matters an excessive hardness of the water.

In other districts a great deal has been done within the last year or two by various Water Companies in softening their excessively hard waters. The "Permutit" system of water-softening appears to be most satisfactory, and it is

claimed that by it an absolutely soft water can be obtained, the hardness being reduced to zero. Permutit is an artificial zeolite, a compound of silica, ammonia and soda. In contact with hard water (where calcium and magnesium salts form the hardness as in Hartlepool water), Permutit abstracts the salts and gives up soda in exchange. The hard water therefore becomes soft, because the sodium salts pass through and the calcium and magnesium are left behind. The action becomes automatic, because when Permutit becomes exhausted it is restored by passing salt solution through it, when the calcium and magnesium are eliminated as chlorides, and with the soda retained the Permutit is again ready for the treatment of more quantities of hard water.

Such a system of water softening might well be applied to the Hartlepool supply, at any rate it is worthy of serious consideration.

Housing.

For many years it has been evident that steps would require to be taken in order to deal satisfactorily with the problem of the many old and insanitary properties in the borough.

From time to time various individual houses were closed, but in 1913 a systematic inspection was made of the worst district, namely, the Cleveland Street area. As a result of the state of things disclosed by house to house inspection, the then Medical Officer of Health (Dr. Leigh) prepared a representation that the area was insanitary, and should be dealt with under the Housing Acts. The Council thereupon considered the matter, and it was decided to divide the area into two parts, one to be dealt with as the Durham Street and Brougham Street Improvement Scheme, the other to be dealt with under the Housing of the Working Classes Act.

19 houses have now been purchased by the Corporation under the first scheme. The Borough Engineer has prepared the necessary plans and estimates for the new houses proposed to be erected. 16 modern dwelling-houses will be provided at a total inclusive cost of £8,400.

In order to deal with the Cleveland Street area a scheme has been prepared, and the necessary particulars are now in the hands of the Local Government Board. It is intended to deal with 107 houses, many of which are now unoccupied. There are, however, 91 families living in the area, comprising 175 adults and 115 children. In the area there are also five common lodging houses with a varying population.

The scheme here is to erect 34 working-class houses. All the details are now complete pending the holding of the Local Government Board inquiry.

The completion of the scheme, and the dwelling-houses erected, will practically revolutionize one of the most depressing and dismal areas of the town, and convert it from being an eyesore into a bright and desirable residential working-class district.

Of course this scheme will not by any means complete the building reforms necessary. There are many other properties which will in course of time have to be dealt with, but fortunately, on a smaller scale.

The future prosperity of the town is largely dependent on the provision of suitable living accommodation for decent self-respecting workpeople, and no doubt a new era will come in an increase of the town's importance and success.

During 1915 it will be necessary to carry out systematically the work of inspection of dwellings necessary under the Housing regulations, in order that existing defects may be remedied without delay.

The following table shows the rates of mortality in the area dealt with by Improvement Scheme as compared with the Borough generally :—

**Information as to the Rates of Mortality
in the Area included in the Scheme as
compared with the Rates for the whole
Area of the Local Authority.**

Year	No. of Deaths in the Borough	No. of Deaths in the Insanitary Area	Death Rate per 1000 in Borough	Death Rate per 1000 in Insanitary Area	Population in Borough	Est'mat'd Population in Insanitary Area	
1894	354	21	15'3	33'8	23000	621	
1895	391	12	16'2	19'5	24000	614	
1896	378	15	15'4	24'7	24500	607	
1897	360	16	14'4	26'6	25000	600	
1898	383	20	15'2	33'7	25500	593	13 Houses closed
1899	386	15	14'8	27'9	26000	536	
1900	375	17	14'4	32'1	26000	529	
1901	472	13	20'6	24'9	23000	522	
1902	378	11	16'4	21'3	23000	515	
1903	375	9	15'9	17'7	23000	508	
1904	361	5	15	9'9	24000	501	
1905	386	17	16	34'3	24000	494	
1906	416	18	17'3	36'9	24000	487	
1907	376	10	15'6	20'8	24000	480	
1908	354	10	14'7	21'1	24000	473	C. L. House closed
1909	321	9	13'3	20'5	24000	438	
1910	347	13	14'4	30'1	24000	431	
1911	418	10	19'9	23'5	20956	424	
1912	359	3	17	7'5	21050	399	
1913	393	11	18'5	28	21152	392	

Mean Death Rate—Borough, 16'0

„ „ **—Insanitary Area, 24'7**

Closet Accommodation.

The water carriage system was adopted some years ago. Most of the W.C's are fitted with small flushing tanks of the capacity of $2\frac{1}{2}$ gallons, but there are still a few houses fitted with waste water closets. These closets are unsatisfactory on account of insufficient flushing and tendency to choking of drains. They are generally offensive as they are not self-cleansing and they ought therefore gradually to be got rid of.

Sewerage.

There are four main outfall sewers—three in Hartlepool and one in Middleton. A 2-ft. 6-in. sewer takes the drainage of the Central Estate, passes down Thorpe Street and discharges into the sea. A 4-ft. sewer takes the drainage of both North and South wards, passes down Baltic Street and discharges into the sea in front of the Naval Barracks. The third sewer is 12-in. and serves for a small area round the lighthouse, near which it discharges. The Middleton sewer is the only tank sewer but it has no valves.

There are two other outfalls, which are not in use, except as overflow discharges.

All the sewage is discharged into the sea above low water level, except at spring tides. No treatment of the sewage is carried out.

Scavenging.

Household refuse is removed daily in covered carts, except in a few cases where covered sanitary bins are provided, when the removal is weekly. It would be an advantage if sanitary bins were universally provided instead of the present nondescript articles which do duty, such as baskets, boxes, broken dishes, tin cans, &c. and a daily service still maintained.

The Borough is fortunate in possessing a destructor, where all the refuse is consumed as it is delivered by the carts. I am informed by the Borough Engineer that there is no difficulty in getting rid of the clinker, which is used for road-making, &c., and that since the war there is an increased demand for tin which is used in toy-making.

Hospital Accommodation for Infectious Diseases.

The Port Sanitary Hospital receives cases from the Borough, from West Hartlepool, and from the Port. The accommodation is limited as there are only two pavilions, each capable of holding 14 to 16 patients. The minimum accommodation for infectious diseases which should be provided by a community ought to be at the rate of one bed per thousand of the population. On this basis Hartlepool would require 20 beds, West Hartlepool 60 beds, and the Port 20 beds. This would give a hospital of about 100 beds.

Adequate accommodation is necessary, as not only may an infectious disease be widely epidemic, but more than one disease may be epidemic at the same time.

It is desirable, too, that most cases of enteric fever, scarlet fever, and diphtheria, occurring in working-class houses should be isolated and nursed in hospital.

With regard to the small-pox hospital, I may mention that the Local Government Board have an order that such a hospital must not be situated within $\frac{1}{4}$ -mile of any other hospital. Here the small-pox hospital is only about 40 feet from the fever hospital. It is evident therefore that these two points—the inadequacy of the present accommodation and the proximity of the small-pox hospital to the fever hospital—require early and serious consideration.

Disinfection.

There is a large amount of waste steam being daily generated at the refuse destructor. I understand that this could be economically employed if a disinfecting and cleansing station was established, and that there is sufficient steam for public wash-houses also.

Co-operation with Military Authorities.

Close co-operation has been maintained with the Medical Officers in charge of troops in the district, notifications of infectious diseases being regularly passed on to them. So far the health of the local troops has been good, no cases of infectious disease having occurred among them.

In finding accommodation for the men the system has been to quarter them in large buildings, such as the skating rink, schools or clubs. No private billeting has been necessary.

Vital Statistics.

The population of the Borough at the census of 1911 was found to be 20,956. There are three parishes included in the Borough—Hartlepool, Throston and Middleton, and the Borough is again divided into four wards—South, North, Throston and Middleton.

The estimated population to the middle of 1914 is :—

South Ward	...	...	5340
North Ward	...	...	6288
Throston Ward	...	...	8340
Middleton	...	...	912
Add Hartlepool inhabitants in the Union Workhouse	...		250
Estimated Total	...		<u>21130</u>

Births.

The number of births registered in 1914 was 648, to which must be added 3 born away from the borough, a total of 651, giving a birth-rate of 30·8 per 1000, as compared with 30·9 in 1913, and 30·7 in 1912. The County birth-rate in 1914 was 31·0 per 1000. There were 17 illegitimate births registered—2·6 per cent. of the total.

Table showing Birth-rate in different Wards for 4 years.

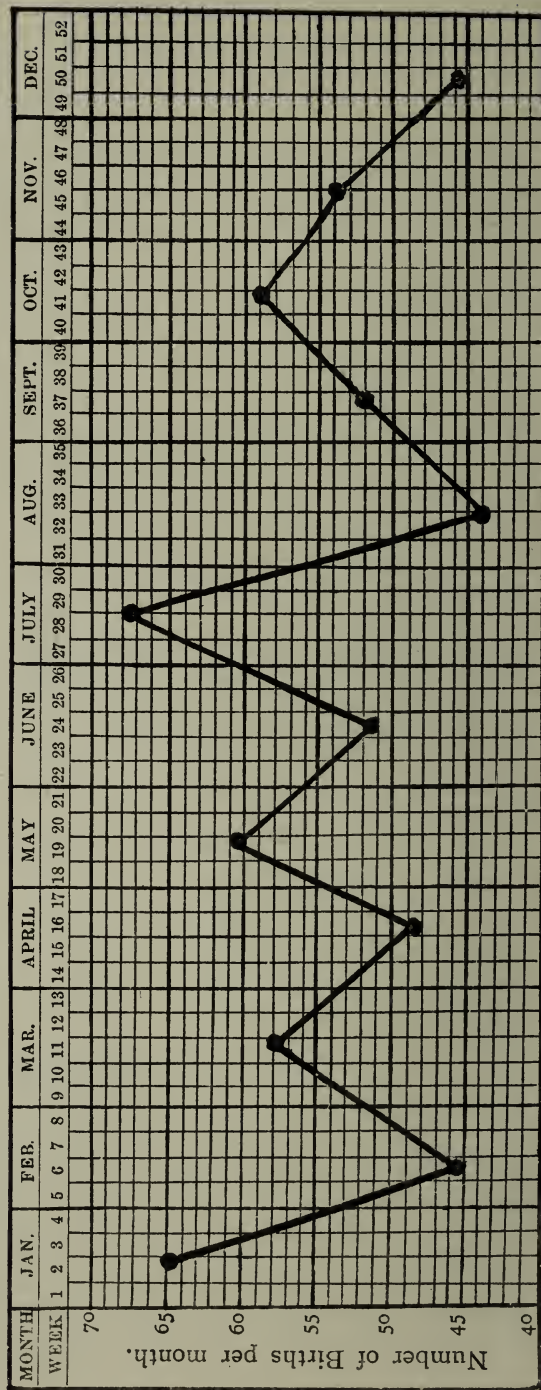
	1911	1912	1913	1914
South Ward	28·05	30·7	32·3	30·7
North Ward	33·47	31·0	28·5	31·3
Throston Ward	33·35	32·1	31·6	30·7
Middleton Ward	33·27	30·7	31·7	33·9

Notification of Births Act, 1907.

This act was introduced to enable Health Authorities to receive information of births earlier than was possible through the Registrar of Births and Deaths. It was found that in many cases infants had died before the Registrar's list reached the Medical Officer of Health. By this act the father (if resident in the house), or any person in attendance on the mother at the time of birth, must notify the birth to the Medical Officer of Health within 36 hours, under a penalty of 40/- for default. In practice all births are notified either by doctors or midwives.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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MONTHLY CURVE OF BIRTHS, 1914.



This is in addition to the registration necessary under the Registration of Births Act, by which the birth must be registered at the Registrar's office within six weeks from the birth.

The School Nurse (Miss Hayden) is also Health Visitor, and carries out regular visitation of infants from birth till they are twelve months old. She advises the mothers on the feeding and general care of their infants, and sees that every thing is done to prevent loss of infant lives. Sanitary defects are notified to the Medical Officer of Health, so that the proper steps can be taken to have them remedied.

During the year notifications of 662 births were received, of which 183 were attended by midwives. The Health Visitor usually visits all midwives' cases, and other cases where the doctor attending has no objection, and which, from the district, appear to be suitable cases for visiting.

The following were the visits paid :—

1st visits	...	...	124
Re-visits	...	...	304
Special visits (where child died under 1 month)	...		8
			<hr/>
			436
			<hr/>

The importance of early visiting will be recognized, when it is known, that of the infants who die during their first year, 22 per cent die in the first week of life, and 57 per cent in the first month.

The Health Visitor reports that only 10 of the infants visited were bottle fed, so that 91 per cent of the infants visited were breast fed, a very satisfactory percentage. (*See Monthly Curve.*)

Deaths.

395 deaths were registered, as compared with 432 in 1913. Of the 395 deaths 48 must be subtracted—being those of non-residents, occurring mostly in the hospitals; and 36 deaths must be added—being deaths of residents which occurred away from the town, or in many cases in the work-house—giving a net result of 383 deaths or a death-rate of 18·1 per 1000, as compared with 18·5 per 1000 in 1913, and 17 per 1000 in 1912.

The County death-rate in 1914 was 14·9 per 1000.

Table showing Death-rate in different Wards for 4 years.

	1911	1912	1913	1914
South Ward ...	18.0	19.0	15.7	20.2
North Ward ...	24.87	17.7	22.0	16.8
Throston Ward ...	18.55	14.9	17.4	16.1
Middleton Ward ...	14.27	20.8	28.4	16.4

DEATHS from Injuries received during the bombardment.

The Registrar's returns give a total of 56 deaths occurring in Hartlepool up to 31st December, as a result of the bombardment by three German warships on 16th December.

The numbers are :—

Soldiers	...	...	9
Civilians: Men		24	
Women		14	
Children		9	
		<hr/>	47
			<hr/>
			56

17 of these deaths occurred among non-residents, leaving 39 deaths, to which must be added 7 deaths (4 men, 2 women and 1 child) taking place outside the Borough, giving a total of 46 deaths, which are distributed in the Wards as follows :—

South Ward	...	23
North Ward	...	7
Throston Ward	...	14
Middleton Ward	...	2
		<hr/>
		46

By the bombardment therefore 2.1 per thousand has been added to the death rate for the year.

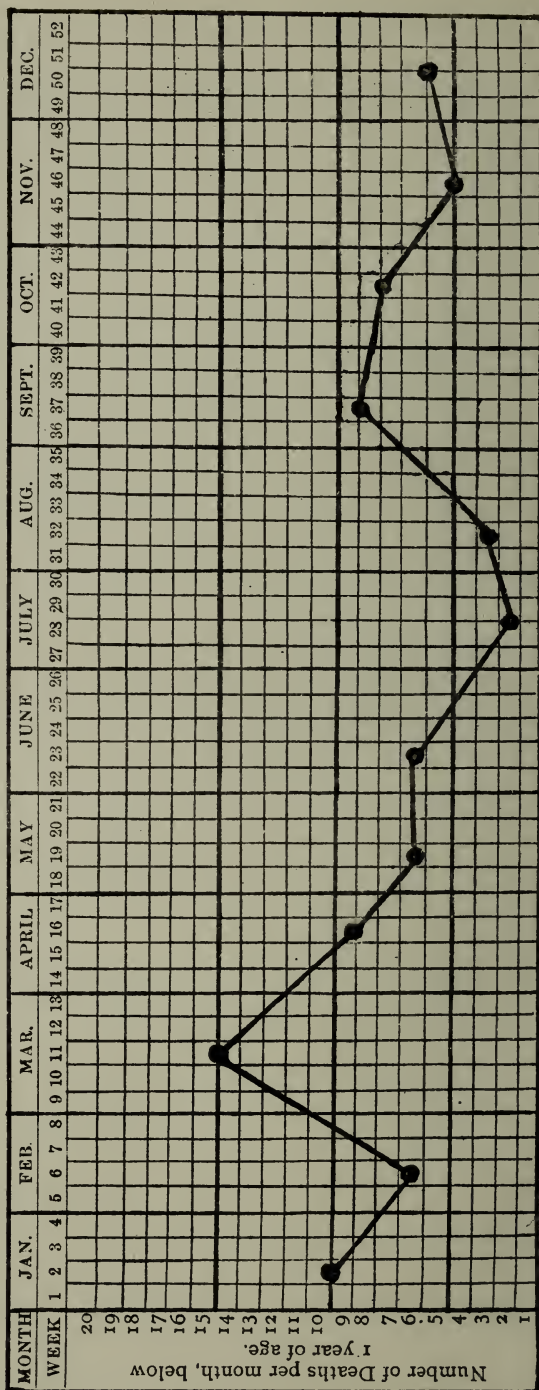
Inquests.

75 inquests were held during the year, 47 being on civilian victims of the raid.

Infantile Mortality.

By this is meant the number of infants per 1000 births who die before reaching the age of one year. From the rate shown a fair idea can be got of the healthiness or otherwise of the district, because it is high in overcrowded or insanitary districts, or where there is gross neglect of the ordinary rules of personal or general cleanliness. Artificial feeding is

MONTHLY CURVE OF INFANTILE MORTALITY, 1914.



generally held to account for a fair number of the deaths, especially when the feeding is careless or improper. Up to the present it has invariably been found that a high birth-rate means a high infantile mortality; but it is hoped that by education and timely advice to mothers, this sequence will be overcome.

There were 85 deaths of children under one year of age, giving a rate of 130·5 per 1000 births. 19 of those who died, died during the first week, that is, 22 per cent or 1 in 5 of the births; and 30 died before reaching one month,—35 per cent of the deaths under consideration. Again, 48 deaths, or more than half, were due to causes operating before birth, or antenatal, as it is termed, as shown by the following list:—

Defect or Disease.	No. of Deaths.
Congenital Malformation	3
Premature Birth	20
Atrophy, Debility, Marasmus	25
	<hr/>
	48

It is clear, therefore, that the antenatal causes of infant deaths will require to be dealt with, and that measures directed against unnecessary infantile mortality will be unsuccessful, until expectant mothers receive the expert care and advice which at present through ignorance or poverty they do not secure.

Table showing Infantile Mortality for 5 yrs.

	1910	1911	1912	1913	1914
Borough of Hartlepool	160	161	106·5	145	130·5
County of Durham	125	158	106	137	133·7

The Infantile mortality for England and Wales for 1914 is only 105, and for 145 small towns 104, so that there is considerable room for improvement if Hartlepool wishes to compare favourably with other towns. (*See Monthly Curve*).

Zymotic Death-rate.

This also gives one a fair indication of the healthiness of the district, but of course it is usual not to rely on this alone, as it may vary very much from year to year, depending upon the presence or absence of epidemic disease. The principal zymotic diseases are small-pox, measles, scarlet fever, diphtheria, whooping cough, typhus, enteric fever, diarrhoea and enteritis. There were 20 deaths from these diseases, giving a death-rate of ·9 per 1000.

Table showing Zymotic Death-rate for 3 yrs.

	1912	1913	1914
Borough of Hartlepool ...	2·6	·9	·9
County of Durham ...	—	1·85	2·2

Table showing Deaths from Infectious Diseases during Three years.

	1912				1913				1914			
	South Ward	North Ward	Thros-ton	Midd-leton	South Ward	North Ward	Thros-ton	Midd-leton	South Ward	North Ward	Thros-ton	Midd-leton
Small-pox	1	...	..	...	...	...	...	...	..	...
Diphtheria	3	..	...	1	...	...	...	...	...	1
Measles	5	6	17	...	...	...	...	...
Whooping Cough	3	4	2	...	1	2	...	...
Scarlet Fever
Erysipelas	1	...	...	...	...
Tuberculosis (Pulmonary)	5	5	3	1	1	9	4	...	2	6	9	...
Tuberculosis (other forms)	5	2	5	1	2	1	2	...
Puerperal Fever	1	...
	5	5	7	1	14	22	28	22	5	9	12	1

	1912	1913	1914
Infectious Death-rate	·85	3·1	1·2 per 1000

Notifiable Diseases.

These are small-pox, cholera, diphtheria, scarlet fever, fever (typhus, enteric, relapsing and continued fever), erysipelas, puerperal fever, tuberculosis (all forms), poliomyelitis, cerebro-spinal meningitis, and ophthalmia neonatorum. The last disease (which is a frequent cause of blindness, and attacks newly born infants) only became notifiable this year, when 9 cases were reported.

Table shewing Diseases notified during 3 years.

	1912				1913				1914			
	South Ward	North Ward	Thros-ton	Midd-leton	South Ward	North Ward	Thros-ton	Midd-leton	South Ward	North Ward	Thros-ton	Midd-leton
Small Pox ...	...	1	3	..	...	...	...	...	...	...	...	...
Scarlet Fever	4	10	14	1	5	8	9	1	6	6	8	1
Diphtheria ...	1	1	3	1	1	2	3	...	1	2	...	...
Erysipelas ...	2	...	2	...	3	2	8	...	6	4	4	...
Enteric Fever	...	...	...	...	...	...	1	...	...	...	...	...
Puerperal „	...	...	...	...	...	...	...	...	...	...	2	...
Tuberculosis (Pulmonary)	11	17	11	1	10	7	10	...	13	19	14	..
Tuberculosis (other forms)	Not notifiable				14	8	13	...	6	7	9	...
Ophthalmia Neonatorum	Not notifiable				Not notifiable				3	1	4	1
	18	29	33	3	33	27	44	1	35	39	41	2

Vaccination.

The Vaccination Officer has kindly supplied me with the following figures relating to 1914 :—

Certificates of successful vaccination	...	401
„ „ exemption	...	108
		<hr/> 509

Only 78 per cent of the children were vaccinated, as compared with 81 per cent last year. There is evident a steadily growing neglect of vaccination, constituting a serious danger to the community, more especially as Hartlepool is a seaport, and constantly exposed to the introduction of small-pox. That there is a real danger will be recognised from the fact that there were four cases of small-pox in 1912 and two contacts dealt with in 1913.

Scarlet Fever.

21 cases were notified during the year, a decrease of 2 compared with 1913. 10 of these cases were removed to the Port Sanitary Hospital. There was no source of infection traced, the cases being distributed over the town, and not confined to any special district. No deaths occurred.

Diphtheria and Membranous Croup.

Three cases were notified, compared with six in 1913. There was one death, giving a death-rate of $\cdot 04$ per thousand. The death-rate for the County was $\cdot 23$ per thousand.

Erysipelas.

14 cases occurred during the year. No deaths occurred

Puerperal Fever.

Two cases were notified and one death occurred, giving a death-rate of $\cdot 04$ per 1000. Both cases occurred in the same district, but were unconnected.

Tubercular Diseases.

This is the second year in which all forms of tuberculosis have been compulsorily notifiable. There were 68 cases notified, 46 of Phthisis and 22 of tuberculosis elsewhere in the body. There were 18 deaths from Phthisis and 5 deaths from other forms of tuberculosis. The following table shows the death-rates for Phthisis in 1913 and 1914 compared with that for the County.

Phthisis Death-rate.

		1913	1914
Borough of Hartlepool	...	$\cdot 6$	$\cdot 8$
County of Durham	...	$\cdot 89$	$\cdot 91$

All cases of tuberculosis notified are visited either by the Sanitary Inspector or myself. Any structural defects in the patient's house are seen to. Where death occurs, or the patient has removed, the house is disinfected. Many of the cases attend the County Tuberculosis dispensary and are sent away to sanatoria, while others have been admitted to the Workhouse Hospital.

Ophthalmia Neonatorum.

There were 9 notifications during 1914, (the first year in which this disease was notifiable), 13·8 cases per 1000 births. Fortunately all the cases did well, and no permanent blindness was left behind. All the cases are visited by the Health Visitor frequently, to ensure that they are receiving proper medical attention.

Non-Notifiable Infectious Diseases.

The most important of these are Measles, Whooping Cough, Chicken Pox, and Diarrhoea.

MEASLES.

The year was characterised by the remarkable freedom from Measles, only 10 cases being reported by teachers. No deaths occurred.

WHOOPIING COUGH.

There were 3 deaths from this, giving a death rate of 0·14 per 1,000, as compared with 0·42 per 1,000 for 1913. The County death rate for 1914 was 0·36 per 1,000.

MUMPS.

15 cases were notified during the year by school teachers. Fortunately there is very little real illness associated with mumps and practically no danger to life.

Other Diseases.

CANCER and MALIGNANT DISEASES.

There were 13 deaths as against 19 last year, giving a death rate of 0·6 per 1,000. The deaths were distributed according to age as follows :—

Ages	15-25	25-45	45-65	65 & upwards
Number of Deaths	1	1	6	5

RESPIRATORY DISEASES.

There were 64 deaths in 1914, a decrease of 8 as compared with 1913.

	1912.	1913.	1914.
Bronchitis	28	29	35
Pneumonia (all forms)	23	41	24
Other Respiratory Diseases (excluding Phthisis) ...	5	1	5
	<hr/> 56	<hr/> 71	<hr/> 64
Death Rates per 1,000 ...	2.6	3.3	2.9

The County Death Rate for 1914 is 2.2 per thousand.

SANITARY ADMINISTRATION.

Common Lodging-houses.

There are now 8 common lodging-houses instead of 7 as previously, as during the year a building, after alterations had been made, was approved and registered.

These houses receive frequent visits from the Sanitary Inspector, as well as from the Medical Officer of Health. Some are kept clean and in good order, but others require constant supervision if a reasonable standard of cleanliness is to be maintained. Not one has been built specially for the purpose and therefore the general suitability is questionable, such structural defects as wooden stairs being present, a serious matter in case of fire.

Under the present housing scheme 5 of these lodging houses will be demolished, in which case a good opportunity presents itself for the provision of an up-to-date hostel for working men of the labouring class, either by private enterprise or, preferably by the Corporation. The control of these common lodging-houses will always be difficult so long as they remain in private hands.

Slaughter-houses.

There are 36 butchers' premises in the Borough :—

Shops	13
Registered Slaughter-houses	12
Licensed Slaughter-houses	11

During the year 1 application for a license was refused as the premises were unsuitable. Many of the premises at present licensed are situated too close to dwelling-houses and are structurally defective, and with so many slaughter-houses it is difficult to carry out systematic meat inspection as one would like it to be done. However, the Medical Officer of Health and the Sanitary Inspector have paid 413 visits to the butchers' shops and slaughter-houses during the year. The undernoted meat was condemned and destroyed :

M-at.	Condition, and action taken.		
4 lots beef	Unsound, condemned and destroyed.		
1 set lungs	do.	do.	do.

Fish.

There is an extensive fish traffic carried on, many large steam trawlers coming into the harbour regularly with their catches. The Sanitary Inspector visits the fish quay daily, and inspects the fish when it is landed and before it is put on the railway or removed from the quay. The fish landed is nearly always of excellent quality, the only action necessary during the year being as below :—

Fish.	Condition, and action taken.		
1 salmon	Unsound, condemned and destroyed.		
5 boxes mackerel.	do.	do.	do.

The fish quay is kept clean and in good order, and there is proper provision for the regular removal of offal.

Fish-curing Premises.

There is 12 of these, depending for their supplies on the local trawling industry. They are visited frequently—not only to ensure a high standard of cleanliness being maintained—but to see that the women employed are working under suitable hygienic conditions.

Bakehouses.

There are 4 registered bakehouses, of which 2 are underground. They are visited regularly, and their general good order found to be maintained.

Milk Supply.

No milk is produced in the Borough, the milk supply being brought into the town from the outside and distributed by 31 milk sellers, as follows :—

Sale of milk only	...	6
Confectioners	... ..	2
General Dealers...	... ..	18
Refreshment Places	... ..	4
Butchers ... ..	... ..	1
		<hr/>
		31

Frequent visits are paid to these premises and attention to the regulations insisted on. I consider, however, that a small general shop is a most unsuitable place for the sale of milk. At such a shop potatoes are generally sold. The objection is that potatoes on being moved about contribute a great deal of dust or earth to the atmosphere, and the milk can scarcely escape being contaminated.

Few of these shops have a suitable place to store milk in summer. Any available area behind the shop is usually occupied by W.C., coal-house, &c., and the yard may not be very clean.

Fried Fish Shops.

These are 13 in number and were visited regularly. No complaints were received regarding them during the past year.

Rag and Flock Act, 1911.

There was only one furniture firm in the Borough using flock, but the business has now ceased. Another firm proposes to take up upholstery in which case samples will be taken as required for analysis.

Contagious Diseases (Animals) Act.

During the year the various orders of the Board of Agriculture have received attention. The Veterinary Surgeon has on two occasions inspected and reported on animals suspected to be suffering from contagious diseases.

Milk and Cream Regulations, 1912

These regulations are that no preservative is to be added to milk or cream (fresh cream). Cream must be labelled "Preserved Cream" and sold as this if there is an added preservative, which can only be Borax, or Boracic Acid, or a mixture of these, or Peroxide of Hydrogen. Cream and Preserved Cream must contain at least 35 per cent of milk fat.

Another condition is that only sugar (cane or beet) is allowed as a thickening agent.

The following is the record of the work done under these Regulations :—

I. Milk and Cream (not sold as Preserved Cream).

- (1) Number of samples examined for the presence of a preservative :—

Milk	...	27
Cream	...	Nil

- (2) Number of samples in which preservatives were reported to be present :—

Milk	...	Nil
Cream	...	Nil

II. Cream sold as Preserved Cream.

- (1) Instances in which samples have been submitted for analysis, to ascertain if the statements on the labels as to preservatives were correct :—

Correct statements made	...	4
Statements incorrect	...	Nil
Total	...	4

- (2) Determinations made of Milk Fat in Cream sold as Preserved Cream :—

Above 35 per cent of Milk Fat	...	4
Below " " "	...	Nil
Total	...	4

- (3) Instances where (apart from analysis) the requirements as to labelling or declaration of Preserved Cream in Article VIII, and the provisions in Article V. 21 of the Regulations, have not been observed ... Nil

- (4) Thickening substances, any evidence of their addition to cream or preserved cream ... Nil
Action taken when found ... Nil

Sale of Food and Drugs Act.

The following table shows the action taken under this act :—

Samples taken under the Food and Drugs Act :

INFORMAL	Number	FORMAL	Number	TOTAL
Milk ...	1	Milk ...	26	27
Butter ...	12	Butter ...	4	16
Condensed Milk	4	Condensed Milk	2	6
Preserved Cream	4			4
Cheese ...	2			2
Lard ...	5			5
Margarine ...	1			1
Bread ...	5			5
Coffee ...	1			1
Pepper ...	2			2
Preserved Peas...	1			1
Cream of Tartar	3			3
	41		32	73

Samples containing Preservatives :

Article.	Amount of Boracic Acid.
4 Preserved Cream	0.5 per cent.
1 Butter	8 grs. per lb.
1 do.	12 " "
1 do.	14 " "
1 do.	16 " "

Remarks :

- 2 Samples of Cheese reported as of inferior quality.
- 2 Samples of full Condensed Milk, reported as being 66 per cent deficient in fat.
- 1 Sample of Preserved Peas, reported as containing a very small quantity of copper.

Poor Law Relief during 1914.

Number of orders issued for admission to Workhouse	293
Number of orders issued for Medical Attendance ...	628
Deaths in Workhouse of Hartlepool cases ...	21
Average number per week in receipt of Outdoor Relief	395

(18.4 per thousand of the population, compared with 19.7 in 1913 and 21.4 in 1912).

TABLE I. *Vital Statistics of Whole District during 1914 and previous Years.*

Year	Population estimated to Middle of each Year	Births		Total Deaths Registered in the District		Transferable Deaths		Nett Deaths belonging to the District				
		Un-corrected Number	Nett		Number	Rate	of Non-residents in the District	of Resi-dents not register'd in the District	Under 1 year of age		At all ages	
			Number	Rate					Number	Rate per 1000 Nett Births		Number	Rate
1	2	3	4	5	6	7	8	9	10	11	12	13
1909	24,000	620	620	25·8	321	13·3			66	106·1	321	13·3
1910	24,000	650	650	27·0	347	14·4			104	160	347	14·4
1911	20,956	652	652	31·1	446	21·2	32	6	105	161	418	19·9
1912	21,059	646	647	30·7	388	18·4	36	7	69	106·4	350	17·0
1913	21,152	646	654	30·7	432	20·8	44	5	94	145	393	18·5
1914	21,130	648	651	30·8	395	18·6	48	36	85	130·5	383	18·1

Total Population at all ages ... 20,956 } At Census, 1911 } 972½
 Total families or separate occupiers ... 4,228 } (land and inland water)

TABLE II. Cases of Infectious Disease notified during the year 1914.

NOTIFIABLE DISEASE	NUMBER OF CASES NOTIFIED.								TOTAL CASES NOTIFIED IN EACH LOCALITY (e.g. Parish or Ward) of District				TOTAL CASES REMOVED TO HOSPITAL		
	At all Ages	At Ages—Years							1 South Ward	2 North Ward	Thros-ton Ward	4 Middle-ton Ward			
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	65 and upw'ds							
Small-pox ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera (C) Plague (P) ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous croup) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas... ..	3	...	1	1	...	...	...	...	...	...	1	2	...	...	...
Scarlet fever	14	1	...	...	...	5	8	...	...	...	6	4	4	...	1
Typhus fever	21	...	4	12	3	...	...	...	...	...	6	6	8	1	10
Enteric fever ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing fever (R) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued fever (C) ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal fever	2	...	...	...	1	1	...	...	...	...	...	2	2	...	...
Cerebro-spinal Meningitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum ...	9	...	...	...	...	...	...	...	...	...	3	1	4	1	...
Pulmonary Tuberculosis ...	46	...	1	20	10	13	2	...	...	...	13	19	14	...	...
Other forms of Tuberculosis...	22	...	6	9	6	1	...	...	...	...	6	7	9	...	...
Totals	117	10	12	42	21	20	10	...	...	...	35	39	41	2	11

*Isolation Hospital or Hospitals, Sanatoria, etc.:—*Port Sanitary Fever Hospital, Hartlepool; Durham County Tuberculosis Sanatoria, Stanhope and Wolsingham; Hartlepoons Hospital (Surgical Cases).

TABLE III.

Causes of, and Ages at Death during the Year 1914.

CAUSES OF DEATH		Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District									Total deaths whether of "Residents" or "Non-residents" in Institutions in the District
		All Ages	Under 1 year	1 and under 2 yrs	2 and under 3 yrs	3 and under 4 yrs	4 and under 5 yrs	5 and under 6 yrs	6 and under 7 yrs	7 and under 8 yrs		8 and under 9 yrs	9 and under 10 yrs
1		2	3	4	5	6	7	8	9	10	11
All causes	Certified	374	83	27	14	19	24	52	77	78	71
	Un-certified	9	2	1	...	1	2	...	1	2	...
Enteric Fever	...	...	...	...	...	...	...	...	...	...	5
Small-pox	...	...	...	...	...	...	...	...	...	...	...
Measles	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	3
Whooping Cough	...	3	1	2	...	...	...	...	...	...	...
Diphtheria and Croup	...	1	...	1	...	...	...	...	...	...	1
Influenza	...	1	...	...	...	...	...	...	1	...	...
Erysipelas	...	...	...	...	...	...	...	...	...	...	...
Phthisis (Pulmonary Tuberculosis)	...	18	..	...	...	2	5	9	2	...	3
Tuberculous Meningitis	...	3	..	1	2	...	...	...	...	...	...
Other Tuberculous Diseases	...	2	1	...	1	...	...	...	...	...	...
Cancer, malignant disease	...	13	...	...	...	...	1	1	6	5	4
Rheumatic Fever	...	2	...	...	...	1	1	...	...	...	...
Meningitis	...	1	...	...	1	...	...	...	...	...	...
Organic Heart Disease	...	37	...	...	...	...	1	4	20	12	3
Bronchitis	...	35	12	3	1	...	...	1	3	15	2
Pneumonia (all forms)	...	24	3	4	3	1	2	4	2	5	2
Other diseases of Respiratory Organs	...	5	...	3	...	1	...	1	...	...	1
Diarrhoea & Enteritis	...	16	7	5	1	...	...	...	2	1	...
Appendicitis and Typhlitis	...	...	...	...	...	...	...	...	...	...	1
Cirrhosis of Liver	...	3	...	...	...	...	...	2	1	...	...
Alcoholism	...	3	...	...	...	...	...	1	2	...	...
Nephritis and Bright's Disease	...	5	...	...	...	...	1	...	3	1	...
Puerperal Fever	...	1	...	...	...	...	1	...	...	..	...
Other accidents and diseases of Pregnancy & Parturition	...	2	...	...	...	...	...	2	...	...	...
Congenital Debility and Malformation, including Premature Birth	...	48	48	...	...	...	...	...	...	...	...
Violent Deaths, excluding Suicide	...	57	...	1	2	13	12	14	13	2	29
Suicide	...	1	...	...	..	...	...	1	...	...	...
Other Defined Diseases	...	76	4	5	2	2	2	12	18	29	17
Diseases ill-defined or unknown	...	26	9	3	1	...	...	...	3	10	...
Totals	...	383	85	28	14	20	26	52	78	80	71

**ANNUAL REPORT of the Medical Officer of Health for
the Year 1914, for the Borough of Hartlepool,**

on the administration of the Factory and Workshop Act, 1901,
in connection with

FACTORIES, WORKSHOPS, WORKPLACES & HOMEWORK.

1.—Inspection of Factories, Workshops & Workplaces

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances

Premises (1)	Number of		
	Inspections (2)	Written Notices (3)	Prosecutions (4)
Factories	263	5	
(Including Factory Laundries) ...			
Workshops			
(Including Workshop Laundries) ...			
Workplaces	263	5	
(Other than Outworkers' premises included in Part 3 of this Report)			
Total ...	263	5	

**2.—Defects found in Factories, Workshops and
Workplaces.**

Particulars (1)	Number of Defects			Number of Prosecu- tions (5)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness	12	12		
Want of ventilation	1	1		
Overcrowding				
Want of drainage of floors	2	2		
Other nuisances	4	4		
Sanitary { insufficient	1			
accommodation { unsuitable or defective... ..				
{ not separate for sexes				
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s. 101)				
Breach of special sanitary require- ments for bakehouses (ss. 97 to 100)				
Other Offences (excluding offences relating to outwork which are included in Part 3 of this Report)				
Total ...	20	19		

* Including those specified in sections 2, 3, 7 and 8 of the Factory and Workshop Act, 1901, as remediable under the Public Health Acts.

3.—HOMEWORK.

OUTWORKERS' LISTS, SECTION 107							
NATURE OF WORK (1)	Lists received from Employers						Notices served on Occupiers as to keeping or sending lists (8)
	Sending twice in the year.			Sending once in the year			
	Lists (2)	Outworkers		Lists (5)	Outworkers		
		Contr-actors (3)	Work-men (4)		Contr-actors (6)	Work-men (7)	
Wearing Apparel— (1) making, &c. ... (2) cleaning and washing Household linen ... Lace, lace curtains & nets Curtains and furniture hangings ... Furniture and upholstery.. Electro plate ... File making ... Brass and brass articles ... Fur pulling ... Cables and chains... Anchors and grapnels ... Cart gear ... Locks, latches and keys ... Umbrellas, &c. ... Artificial flowers ... Nets, other than wire nets Tents ... Sacks ... Racquet and tennis balls... Paper, etc., boxes, paper bags ... Brush making ... Pea picking... Feather sorting ... Carding, &c. of buttons, &c. Stuffed toys ... Basket making ... Chocolates and sweetmeats Cosaques, Christmas crack-ers, Christmas stockings, &c. ... Textile weaving ... Total ...							Nil

Nil

4.—Registered Workshops

Workshops on the Register (s. 131) at the end of the year	Number
Dressmaking	6
Millinery	4
Boot Repairing	7
Tailoring	1
Fish-Curing	12
Bakehouses	4
Others	11
Total number of Workshops on the Register ..	45

Important classes of work-shops, such as workshop bakehouses, may be enumerated here

5.—Other Matters

Class	Number
Matters notified to H.M. Inspector of Factories:—	
Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901)	
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Acts (s. 5, 1901)—	
Notified by H.M. Inspector ..	2
Reports (of Action taken) sent to H.M. Inspector	2
Other	
Underground Bakehouses (s. 101) in use at the end of the year	2

INDEX.

	PAGE
Bakehouses	21
Births	12
Birth Rate	12
Cancer and Malignant Disease	19
Closet Accommodation	10
Common Lodging-houses	20
Co-operation with Military Authorities	11
Deaths	13
Deaths (bombardment)	14
Death Rate	14
Disinfection	11
Factory and Workshop Act	29
Fish	21
Fish-curing Premises	21
Hospital Accommodation... ..	11
Housing	7
Infantile Mortality	14
Inquests	14
Legal Summary... ..	2
Milk Supply	22
Notification of Births Act	12
Notifiable Diseases	16
Non-notifiable Diseases	19
Ophthalmia Neonatorum... ..	19
Poor-Law Relief	24
Sale of Food and Drugs Act	24
Sanitary Administration	20
Scavenging	10
Sewerage	10
Slaughter-houses	20
Statistical Memoranda	2
Tables I, II, III, IV	25, 26, 27, 28
Tuberculosis	18
Vaccination	17
Vital Statistics	12
Water Supply	5
Zymotic Death Rate	15

PART II—EDUCATION.

Borough of Hartlepool.

EDUCATION COMMITTEE.

Chairman : ALDERMAN M. HARRISON.

Vice-Chairman : COUNCILLOR R. HUNTER.

Members of Council :

ALDERMAN BUTTERWICK	COUNCILLOR FIRBY
„ HARRISON	„ GIBB
„ HUNTER	„ GRAHAM
„ ROWE	„ HUNTER
COUNCILLOR ATKINSON	„ NIELSEN
„ BRICKMAN	„ TURNER
„ CHARLTON	„ WATSON

Co-opted Members :

MR. F. H. R. ALDERSON	MRS. KEARSLEY
MR. T. M. ARMSTRONG	MR. W. MCBRIDE
MRS. CHARLTON	MR. EDWARD OLIVER

MR. T. H. PEVERELL.

Secretary : H. W. BELL, ESQ., TOWN CLERK.

School Medical Officer :

GEORGE JUBB, M.D. (Glasgow), D.P.H. (Oxon).

Treasurer : MR. CHRISTOPHER ROBSON, F.S.A.A.

School Nurse : MISS ALICE HAYDEN, Cert. R.S.I.

School Wardens : MR. H. FORDHAM & MR. J. MITCHELL.

Surveyor : MR. W. WATT.

BOROUGH BUILDINGS,

HARTLEPOOL,

February 1st, 1915.

*To the Chairman and Members of the
Education Committee of the Borough of Hartlepool.*

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have the honour to present you with the report for the year 1914, on the working of the scheme of medical inspection in the elementary schools of the Borough.

The results obtained in securing treatment of the defects discovered may be considered satisfactory, considering what an eventful year 1914 has been for our country, and especially for Hartlepool. I think it will be recognised that the Inspection clinic, which was opened at Baltic Street School over a year ago, is doing good and useful work, and that this is acknowledged both by parents and teachers is shown by the steady and progressive increase in the numbers of children attending.

I am indebted to the Committee for the kindly consideration you have always given to my suggestions and recommendations. I have great pleasure also in cordially thanking the teachers, officials and others who have given their invaluable and generous help.

I am,

Mr. Chairman, Ladies and Gentlemen,

Your obedient servant,

GEORGE JUBB.

School Medical Officer's Report,

1914.

SECTION 1.—General Information.

The Schools in the Borough of Hartlepool are ten in number, five being Provided schools and five Non-provided.

1. Provided Schools.

Name of School.	Departments.	Accommodation.	Average Attendance.
Church Close	B.—G. Infts.	738	647
Throston	" "	839	664
Hart Road	" "	723	583
Baltic Street	" "	722	703
Galley's Field	Boys, Girls	654	480

2. Non-Provided Schools.

Middleton St. John's	Mixed & Infts.	232	182
St. Bega's R.C.	" "	409	357
St. Mary's R.C.	" "	210	170
Ann Crooke's	Boys	144	132
Prissick	Infants	194	126
		4,865	4,044

The Schools at Throston have been condemned and a site nearer the sea secured for new schools. The plans for new schools have been approved by the Board of Education, with one or two suggestions for minor alterations, and it is probable that building will be commenced shortly.

With the exception of St. Mary's (which is practically a new school) most of the schools are old and are placed on small and crowded sites. Church Close Schools have no play-grounds and the children play and drill in the adjoining side streets, which fortunately are quiet and free from traffic. It would appear somewhat difficult to carry out open-air classes under these circumstances. Few of the schools possess central halls, so that drill on wet days is much curtailed.

The means provided for ventilation appear to be sufficient in most schools; they only require full and rational use by the class teachers, before, during, and very particularly, after school sessions.

The window lighting in most is fairly good, and probably no improvement needs to be suggested.

The artificial lighting in all is satisfactory, two of the schools are lighted with electric light and eight with gas and incandescent mantles.

The schools are warmed by means of low pressure hot water systems, in many cases supplemented by open fires. Only in one or two schools are there complaints with regard to the heating, the fault usually being that too small a boiler is in use, with the result that the classrooms at the top of the circuit are insufficiently warmed.

Each school is supplied with water from the town mains and has a sufficient provision of water closets. Toilet paper is freely supplied and so far there have been no complaints of waste or abuse.

Sufficient wash-basins are provided but the supply of towels is inadequate, it being a common thing to find a row of five or six wash-basins and only one towel hung up. There ought to be a standing provision of one towel per basin, each towel hung on its proper place on a roller, and all towels should be changed at least twice a week. There is no doubt that an inadequate supply of towels, and hence an enforced insufficient cleanliness of hands, will readily lead to the spread of impetigo and ophthalmia, two conditions which are very prevalent in the schools.

The cleanliness of schoolrooms and cloakrooms appears to be maintained at a satisfactory level. Formerly various proprietary articles were in use for the purpose of allaying the dust, but these have now been abandoned in favour of the old methods. There appears to be a liberal provision of mats at the school doors and on stair landings, &c., so that as little mud and dust as possible should be carried into school. If any fault can be found it is with the condition of the windows, but it can be readily understood that with a smoky atmosphere and frequent rain it is a difficult or impossible task to keep windows bright and clean.

There is no special provision for drying clothes and boots, though most of the cloakrooms are heated with hot water pipes. Fortunately the children in no case have far to come to school, and they are fortunate also in that they all have the time and opportunity of going home for a mid-day dinner.

SECTION II.—General Arrangements for Medical Inspection.

Co-relation between the School Medical work and the Public Health service is effectively secured by the School Medical Officer being also Medical Officer of Health. On the receipt of a notification of infectious disease affecting a school child or occurring in a household from which children are attending school, notice is sent to the School Wardens (Attendance Officers) and to the Head Teacher concerned, and steps are taken to exclude all contacts for the time necessary, such children being only re-admitted to school on a further certificate from the Medical Officer. The Head Teachers also report immediately cases of the non-notifiable infectious diseases such as mumps, measles, whooping cough and chicken pox occurring among their school children, and steps are taken to exclude such cases together with the contacts when necessary.

Notwithstanding the prevalence of mumps during the closing months of the year it was not necessary to close any school or department on account of infectious disease.

The organization of medical inspection appears now to have settled on well defined lines and no change has been made in the routine of previous years. Each Head Teacher every quarter makes a return, shewing the number of children for inspection under the different headings—entrants, leavers, specials, and 8-year-olds. Two or three weeks' notice is given of the date of visit so that the teacher has plenty of time to enter the necessary particulars on each record card and to notify parents. A day or two before the actual inspection the teacher weighs and measures each child selected for inspection, in ordinary clothing, but without boots, and registers the results on the record card, together with an opinion regarding the usual condition of the child's boots and clothing.

The methods of inspection are much as in previous years. On the day of inspection the customary physical examination of each child is carried out, the condition as regards nutrition, cleanliness, mouth, throat and teeth, skin, ears, heart and lungs being noted. Lastly the eyesight and hearing are tested at a distance of 20 feet, and the mental powers estimated if short of normal.

The record card used for preserving the results of medical inspection follows closely on the lines of the Board's Schedule of Medical Inspection, so that there has been no departure from the Schedule.

Assistance by School Nurse, Teachers and School Wardens (Attendance Officers).

The School Nurse (Miss Hayden) renders great assistance both in attendance at the Inspection Clinic and at the medical inspection, and afterwards in visiting the homes and following up the cases of children found to be defective. She also pays regular visits to the schools for the purpose of making "head to head" inspections in the girls' departments, and there is no doubt these visits are useful in preventing the lapses from cleanliness that would otherwise occur.

I have much pleasure in acknowledging the invaluable services of the teachers in carrying out the various preparations for the medical visit. With very few exceptions throughout, everything asked for—such as weighing and measuring children, notifying parents, preparing record cards, &c. has been painstakingly accomplished, so that the actual working at the school on the day of inspection has been smooth and pleasant. It is gratifying to notice the increasing interest teachers take in medical inspection now that they realize the benefits likely to be secured from it, not only to the school children, but to themselves as teachers.

The School Wardens give useful help by supplying weekly a list of children absent from school, with the duration of absence in each case, and the cause of absence assigned. Where no doctor is in attendance the School Nurse calls, makes inquiries, and if not satisfied, directs the child to attend at the inspection clinic for examination. Where a doctor is in attendance the School Wardens communicate with him in all cases where the absence from school exceeds 7 days. The medical practitioners in the town have already rendered great services in preventing unnecessary and vexatious absenteeism, and I have much pleasure in acknowledging the courtesy the School Wardens receive on these occasions.

The School Wardens also "follow up" the cases of defective vision, arranging for their examination by the oculist and afterwards for the supplying of glasses, where the parents are poor and can only pay by instalments.

Attendance of Parents.

The Head Teachers are supplied with cards for notifying parents when their children are to be inspected, and at the same time obtaining returns of previous illnesses. Parents

then receive a direct invitation to be present at the inspection. During 1914, 94 parents attended as compared with 114 in 1913, and 81 in 1912. I believe, however, that it will be possible in the future to bring out more parents. In many cases a satisfactory medical examination is only possible if a parent or other relative is present.

No notice of objection has been received, but many applications from parents to have their children examined as special cases. Nearly every child coming to the inspection clinic is accompanied by its mother, or sister, or aunt.

A written notice of the defect discovered is sent to the child's home, and, if a child requires to be excluded from school, a written notice to attend on certain days at the clinic. All defective children are re-examined, usually in about eight weeks' time, and those still without attention are visited by the School Nurse, who interviews the parents.

In cases of further neglect to attend to a child's condition, special letters are written to the parents and notices served under the Children's Act.

The results obtained are probably as satisfactory as those obtained in other districts, but there can be no doubt that the provision of a school clinic for treatment would secure that a larger number of children would receive satisfactory and effective treatment.

Disturbance of School Routine.

Everything possible is done to obviate unnecessary disturbance of the ordinary school routine. Usually a classroom is utilized, as very few teachers' rooms are large enough for the purpose. This calls for intelligent re-arrangement of the other classes, but most teachers have little difficulty in successfully managing this after a little experience.

I find, on the other hand, that it is often necessary to remind teachers that noisy lessons and singing render quite impossible such delicate examinations as that of the heart, lungs and hearing.

SECTION III.—Extent and scope of Medical Inspection.

During 1914 the visits paid to the schools for the purpose of medical inspection numbered 64, and for the re-inspection of children found to be defective at the ordinary inspection, 32. This appears to be ample, considering how accessible all the schools are, and there is no evidence of any “leakage” such as is commonly found in rural districts.

Children examined.

Four classes of children have been selected for medical examination :

- 1.—*Entrants* : Children newly admitted to the Infants’ Department or who have escaped examination at previous visits to the Infants’ Department. These children are usually 3, 4 or 5 years of age.
- 2.—*Leavers* : Children 12 years of age or those of 13 not previously examined in this class.
- 3.—*Extra class* : An intermediate class between Entrants and Leavers, *e.g.* Children 8 years of age.
- 4.—*Special Cases* : Children examined at the request of parents, teachers or school wardens, or noticed by the medical officer when going round the school.

The number of children examined was 1,725, forty-two per cent of the average number of children attending school. The following figures shew the distribution of the children in the various classes :

		BOYS.		GIRLS.		TOTAL.
Entrants	...	328	...	302	...	630
Leavers	...	402	...	425	...	827
Eight years	...	103	...	120	...	223
Specials	...	13	...	26	...	45
		<hr/> 852		<hr/> 873		<hr/> 1,725

Age and Sex of Children inspected.

This is shewn in the following table, and further particulars will be found in Table I (page 26).

Age in years	3	4	5	6	7	8	9	10	11	12	13	Total
Boys	30	110	160	28	8	103	5	4	2	371	31	852
Girls	19	83	171	29	28	120	1	5	2	386	39	873
	<hr/> 49	<hr/> 193	<hr/> 331	<hr/> 57	<hr/> 26	<hr/> 223	<hr/> 6	<hr/> 9	<hr/> 4	<hr/> 757	<hr/> 70	<hr/> 1725

The Inspection Clinic.

Most of the children referred for subsequent or further examination are directed to attend at the Inspection Clinic. This is held at Baltic Street School in a room specially set apart, and fitted up for the purpose. The School Medical Officer and the School Nurse attend on Tuesdays and Fridays at 9-30 a.m., and an opportunity is then afforded for parents, teachers and wardens to send any children who require examination. Children excluded from school under Article 53 (b) also attend, to ensure that regular and sufficient treatment is being carried out, and to receive in due course their certificates for re-admission to school.

In 1914, the first complete year of the clinic, 375 children attended, accompanied in 229 cases by parents. These children made 677 attendances, and towards the end of the year there was usually an average attendance of 22 children each clinic day, so that the clinic often occupied about two hours.

Every child sent by an attendance officer is given, by him, a card with name, school, address and duration of absence, and takes back the card signed by the Medical Officer with date for a subsequent visit, if found necessary. 53 children were thus sent by the School Wardens.

A register is kept and children present themselves bi-weekly or weekly according to their condition, and the attention being paid to their complaints. In addition, the School Nurse is at the clinic every morning, and verminous children or those with impetigo report themselves daily to ensure that treatment is being carried out.

The diseases coming under observation are ringworm, impetigo, blepharitis, conjunctivitis, eczema, otorrhœa and verminous heads and bodies. Teachers frequently send children for eyesight to be tested, thereby obviating delay which would be incurred by waiting for the next routine inspection.

One cannot shut one's eyes to the fact that much valuable time is being lost by not treating these cases at the clinic. Where there are sores in the hair, say of girls' heads, it is most difficult to induce parents to cut the hair round the sores, or to go a step further and cut the hair short, as in the case of nits. Cases of blepharitis, ear discharge, and sores, turn up day after day with every appearance of either not being treated at home or else getting very insufficient treatment.

Diseases met with at Clinic.

Disease.	Number of Cases.
Vermineous (head) ...	40
„ (body) ...	14
Impetigo ...	35
Ringworm (head) ...	28
„ (body) ...	8
Itch ...	18
Other Skin Diseases ..	10
Abscesses ...	5
Ophthalmia (phlyctenular)	88
Blepharitis ...	13
Other Eye Diseases ...	6
Vision Testing ...	12
Otorrhœa ...	4
Tonsilitis ...	6
Bronchitis ...	4
Tuberculosis (Lungs) ...	10
„ (Peritoneum)	1
„ (Hip Joint) ..	1
Miscellaneous (irregular attenders) 72	
	<hr/>
	375

Notices of Defect sent to Parents.

In every case where a condition was found requiring attention or treatment, a notice calling the parent or guardian's attention to the matter was sent to the child's home. This was in many cases followed by re-examination and, where no attention was paid to the first notice, the further measures detailed elsewhere.

658 notices were sent out. A classified statement of the defects will be found in Table IV in the appendix.

Cost of Medical Inspection.

I am obliged to the Borough Treasurer for the following statement as to the cost of medical inspection for the year 1st April, 1913, to 31st March, 1914:—

Salary of Medical Officer ...	£150	0	0
„ School Nurse ...	20	0	0
Spectacles	8	2	6
Sundries (Stationery, Printing, &c.)	39	9	10
		<hr/>	
		217	12 4
Less cost of Spectacles repaid ...	14	1	6
		<hr/>	
		£203	10 10

SECTION IV.—Facts disclosed by Medical Inspection.

The following table gives the height and weight for boys and girls at the different ages, and contrasts the results obtained for Hartlepool with those of Durham (County) and of England generally. The table shows apparently that at most ages the local children fall below the standards both for the County and for England. I believe this can be confirmed by general observation, although the figures used in the table are not obtained by methods which can claim any scientific accuracy. If each child could be weighed and measured exactly on his birthday, and with as little clothing as decency would allow, I have no doubt tables could be compiled upon which one could place some reliance, and from which useful deductions could be made.

BOYS.

Age	Number Examined	Height in Inches			Weight in Pounds		
		Hartlepool	Durham County	England	Hartlepool	Durham County	England
3	30	36.1	36.9	36.4	31.9	34.3	32.9
4	110	38.3	38.4	38.6	34.8	35.8	35.7
5	160	39.0	40.2	40.7	36.7	38.3	38.6
6	28	41.8	41.8	43.0	41.8	41.6	42.2
8	103	46.3	46.0	47.4	52.6	49.5	52.0
12	371	53.5	53.8	55.1	68.7	72.3	72.7
13	31	55.3	55.7	56.0	76.2	77.1	77.4

GIRLS.

3	19	36.2	35.4	35.9	32.5	31.1	31.6
4	83	37.8	38.0	38.3	34.2	34.4	34.9
5	171	39.8	40.3	40.4	37.7	37.5	37.7
6	29	42.5	41.7	42.5	41.8	39.8	41.2
8	120	46.1	46.2	46.9	50.1	49.0	49.5
12	386	54.3	54.5	54.7	70.5	71.8	72.7
13	39	58.5	57.0	56.8	81.2	79.0	80.3

Clothing.

Of the children inspected a considerable proportion were found to be not satisfactorily clad. Of 1680 entrants, leavers and 8 years old, the clothing was unsatisfactory in 141 cases. Including the special cases examined the clothing was unsatisfactory in 151 cases, that is in about 9 per cent of the cases. This does not relate to the condition on the day of inspection, but to the usual or abnormal condition as observed by the teacher day by day. The unsatisfactory conditions most common are over clothing, ragged, dirty and verminous clothing, and occasionally insufficient clothing. One very bad case, found on a winter's day, was a girl of 12, whose sole covering for her body was a coat. Most of the bad cases were already under the case of the N.S.P.C.C.

Footgear.

This was found to be unsatisfactory in 169 cases, namely 56 in entrants, 86 in leavers, 16 in the intermediate group, and 11 in the special group, that is again 9 per cent of the children examined.

36 boys and 10 girls were found to be without boots, and on being questioned it was discovered that they did not possess boots even at home. Many other children besides those examined were noticed to be without boots, no matter how wintry the weather might be. These children plainly shewed the effects of the cold they were enduring and, in addition, they are constantly coming to the Clinic with sores on their feet. The "Henry Smith" Fund no doubt supplies boots every Xmas, but only to a limited number, 12 at each school, and it is therefore insufficient to cope with this distressing state of affairs. Given proper organization, I should think there should be little difficulty in securing a sound pair of clogs for every child in want of boots.

Cleanliness of Head and Body.

	Entrants.	Leavers.	Intermediate.	Special	Total
Nits present ...	66	95	33	15	209
Pediculi present in hair	5	3	1	1	10
Body dirty ...	34	81	16	1	132
Pediculi present on body	5	7	5		24
	<hr/> 117	<hr/> 186	<hr/> 55	<hr/> 17	<hr/> 375

375 children out of 1,725 were thus found to be in this disgraceful condition, that is one child in every 5, or 21 per cent. The presence of body lice is most disgusting and is an indication of unspeakable neglect in the home.

The uncleanness of the girls' heads is also very shocking and at times one almost despairs of ever obtaining a higher standard than at present exists. I doubt very much if better or more lasting results will ever be secured until a different fashion sets in with regard to the length of hair permitted. There is no good reason why a girl should not wear her hair as short as a boy does, and, as is shewn by the result of medical inspection, a very good reason why she should.

The duty of calling attention to personal uncleanness or carelessness is a very difficult one for a teacher to carry out, and a teacher who does her duty soon finds herself in conflict with the parents. But with tact and persistence a great deal more could be done. It would not be too much to ask lady teachers to make, say, weekly examinations of the hair of the girls in their classes, in order to keep up the standard of cleanliness aimed at.

Where no improvement takes place, in spite of repeated warnings, I believe the best way would be to prosecute the parents for neglect, through the Society for Prevention of Cruelty to Children, as in this way a healthy public opinion would be formed, and the sympathies of other parents enlisted on the right side.

Before leaving the consideration of the question of uncleanness it may with advantage be pointed out that a much higher standard of cleanliness of hands and skin generally should be required. Particularly should teachers see that finger nails are kept short, as being the only way of preventing the spread of contagious skin diseases, impetigo, ringworm, and itch.

Nutrition.

It is sometimes very difficult to estimate the state of nutrition of children in different schools, and the standard in consequence may unconsciously be raised or lowered according to the type and social condition of the majority of the children being examined.

It is laid down by the best authorities that in endeavouring to form an estimate of a child's nutrition, consideration ought to be given generally to the following seven factors :

- 1.—The ratio of height to weight. Within reasonable limits there ought to be a correspondence between height and weight according to age, and neither must be excessive or deficient.

- 2.—The general firmness and substance or build of the tissues shewing that the proper kind of tissue is being built up, or in other words that suitable food is being given.
- 3.—The degree of development of the muscular system, as indicating that sufficient and suitable exercise is being taken.
- 4.—The presence of subcutaneous fat, shewing that the child is being "well nourished" and has the reserve needed for the demands which growth imposes on the organization.
- 5.—The condition of the blood supply to the skin and mucous membranes as evidenced by their good colour or the reverse, anæmia. This is important as indicating whether or not the internal organs such as the heart, brain, &c. are being well supplied with pure blood.
- 6.—The presence on the one hand of brightness, keenness, alertness; or on the other hand of listlessness, dulness or apathy, dependent largely on both the preceding and succeeding factors.
- 7.—The activity and good order of the various functions of the body such as mastication, digestion, assimilation and excretion, in other words, all the signs which indicate that the child in question is a healthy animal.

As far as possible in the short time available for the examination of each child a more or less rapid estimate, following on these lines, has been made of the physiological condition of each individual child presented, and the result apportioned to one of four grades, excellent, normal, below normal, bad. The following table gives the numbers of entrants, leavers, 8-year-olds and special in each grade :—

	Entrants,	Leavers.	Extras.	Special	Total
Nutrition excellent	41	13	3		57
„ normal	468	664	160	29	1331
„ below normal	106	124	55	15	200
„ bad	15	26	5	1	47
	<hr/> 630	<hr/> 827	<hr/> 223	<hr/> 45	<hr/> 1725

347 children out of 1,725 examined were thus below normal, that is 20 per cent or one child in every five. The number of really healthy looking, well nourished, and well grown children is very small.

Late hours are the commonest cause of this poor nutrition, the child keeping the same hours as its elders, who labour under the delusion that they are shewing their kindness in keeping the child out of bed. Provision of the wrong kind of food is another frequent cause of malnutrition, also unlimited tea, the excessive use of starchy foods such as bread and potatoes, and the use of condensed milk and other tinned and cooked foods. A common dietary for many school children is tea and bread for breakfast, tea and bread for dinner, and tea and bread again for supper, varied occasionally by fried fish or chipped potatoes by way of a treat.

Diseases of the Nose and Throat.

The percentages of these defects are :—

	Entrants.	Leavers.	Extra class.
Mouth breathers	3·9	2·4	6·2
Tonsils, slight	3·4	3·7	8·9
„ marked	3·4	5·9	4·9
Adenoids, slight	1·2		3·5
„ marked	1·2		

I am under the impression that this district is characterized by an unusually low percentage of adenoids. Enlarged tonsils were more common, especially in the case of girls. The percentage of mouth breathing is also very low, when compared with other parts of England. It is noticeable that the number of those defects usually due to the presence of adenoids, such as running ears and deafness, is also very low.

External Eye Disease.

Only 27 cases of external eye disease were discovered at the routine examination. Blepharitis was the most frequent condition. Many cases of external eye disease are not seen at the routine examination as they are sent to the clinic whenever they are discovered, so that medical attention can be got without delay.

Most of these eye conditions are preventable and ought therefore to be prevented. Stricter personal cleanliness, clean hands and clean faces, and the scrupulous observance of the common rules of personal and domestic hygiene would soon eradicate these diseases.

Ear Disease.

The common ear disease is otorrhœa or ear discharge, often found associated with adenoids or left as the result of inflammation of the middle-ear during an attack of measles or scarlet fever. There were 10 cases of ear discharge during 1914.

Most cases of ear discharge are curable, but it is necessary that the treatment should be thorough and persevered in till a complete cure is obtained.

Teeth.

Of the 1725 children examined 1188 were found to have perfectly sound teeth. A comparison of the results is probably more easily made by an inspection of the percentages of children falling into the three classes, as below :—

	Entrants.	Leavers.	Extra class.
Sound	78·2%	65·1%	59·1%
Less than 4 decayed	16·9%	30·5%	39·3%
4 or more decayed	4·6%	3·9%	4·6%

The teeth of the Hartlepool children are really good when compared with the condition of things that obtains in other districts of England. Taking the three classes of children together, only 3·3 per cent have many decayed teeth in their mouths, and 67 per cent were found with sound teeth. My personal experience here, although a short one, is to see set after set of beautiful sound teeth but with absolutely no care being bestowed on them. It was noticeable that where the teeth were so good the colouring of the lips and gums was exceptionally brilliant.

The foregoing remarks, however, are not to be taken to mean that the services of a School Dentist are not necessary in this district. Quite the contrary, because among the comparatively few who suffer from bad teeth the dental work would be all the easier overtaken.

An effort ought to be made to teach school children the necessity for taking proper care of their teeth, and steps taken to ensure that every child is provided with a toothbrush, and uses it every night or oftener.

Heart and Circulation.

2 cases of organic heart disease, 5 cases of functional disease, and 12 cases of anæmia were noted. Of course there were many cases where a moderate or slight degree of anæmia

was present. It is usually a very difficult matter to get parents to realize that anæmia is a very serious condition, requiring urgent attention. A common answer to the warning is that all the members of the family are pale and therefore the anæmia can be lightly regarded.

Lungs.

		Entrants.	Leavers.	Extra Class.
Bronchitis	...	12	1	1
Tuberculosis	...	6	2	4
„ suspected		2	3	2

As shewn by these figures 12 children (·6 per cent.) were discovered to be suffering from phthisis and 7 more were suspected and steps taken to put them under medical care. All these children were referred to the tuberculosis dispensary, which is fortunately accessible and convenient from all parts of the town.

Nervous System.

Only 4 cases of nervous disease were recorded, one being a case of chorea. Chorea is really a rare disease, and children suffering from it are very seldom found at school. It is more surprising not to find a single case of epilepsy.

The Skin.

The numbers are :

Ringworm (head)	...	5 cases
„ (body)	...	2 „
Impetigo	...	17 „
Other Skin Diseases	..	12 „
		<hr/> 26 „

It must be remembered that, as with external eye diseases, children suspected to be suffering from contagious skin diseases are at once sent to the clinic for an opinion, so that there may be no delay in excluding them from school and securing proper treatment.

No case of itch was discovered at the routine examination.

Rickets.

Slight rickets	...	13
Marked rickets	...	7
		<hr/> 20

Rickets was therefore present in 1.1 per cent. of the children examined. Slight cases of rickets are easily missed, and in any case as a child grows older many of the signs of slight rickets disappear. The extreme cases shew distressing and disfiguring deformities, such as knock knees, bow legs and tibial curves. Slight rickets on the other hand is the chief factor in producing stunted, undersized men and women with narrow chests.

Deformities. These were 14 in number or .8 per cent.

RICKETS	{	Pigeon chest	...	4
		Bow legs	...	3
		Knock knees	...	2
		Tibial curves	..	1
		Tubercular Hip Joint		
		Disease (old)...		1
		Wry neck	...	1
		Talipes	..	1
		Infantile paralysis		1
				<hr/>
				14

Many of these cases could be improved by operative treatment, and it is to be hoped that the cases most amenable will soon be attended to.

Non-Pulmonary Tuberculosis.

Cases of this description were happily very rare in 1914. Only 2 cases of tuberculosis of bones and 1 case of tubercular glands were noted. Early treatment is very necessary in these conditions, because not only is there some danger to life but there is always a great risk of permanent lameness being produced when the bones or joints of the leg, such as hip or knee, are attacked.

Speech Defects.

8 cases of defective articulation and 1 case of stammering were noted, giving a percentage of .5. Speech defects are a very serious handicap in later life and the teacher ought to be on the look out for them and give the defective one the personal attention which is required to overcome the special difficulty.

Mental Condition.

11 children were returned as dull or backward, giving a percentage of 1.0 of the 1,095 children whose mental abilities were considered. 5 of these dull children were leavers, 5 were 8 year olds, and 1 was a special case. Some of these children are only backward in some subject such as arithmetic, or occasionally they may be slow in learning to read.

No case of actual mental deficiency was noted during the year.

Defective Vision.

The general results of the visual acuity tests of leavers, 8 year olds and specials were :—

	Boys.	Girls.
Good Vision, 6/6 ...	71.3 %	61.8 %
Fair Vision, 6/9 and 6/12	14.5 %	18.9 %
Bad Vision, 6/18 or worse	14.1 %	19.2 %

The figures shew the greater amount of bad eyesight among the girls, the percentage of boys with bad eyesight being 14.1 while for the girls it is 19.2. This difference is often ascribed to the fine sewing girls do at school, but possibly the games and habits generally of the sexes may play a greater rôle than is at first apparent. It seems advisable to suggest that sewing ought to be taken in the morning sessions when the light is good and the girls are not yet feeling the fatigue of a long day at school.

Squint.

Altogether 33 children were discovered to be suffering from squint, two per cent of the children examined. This is a very serious condition which can only be properly treated by the provision of spectacles without delay. Even this alone is often not sufficient, as the squinting eye has become functionless by disuse, and measures require to be taken to enforce its use, as by covering up the sound eye for a period and thus bringing the squinting eye into its normal axis again. At present this is a condition it is most difficult to secure treatment for, and even when glasses have been provided they are soon discarded.

Hearing.

As the hearing of infants is only tested in a general way the results are only recorded for leavers, 8-year-olds, and special cases. The percentage of good hearing and of deafness is given in the following figures :—

	Boys.	Girls.
Good hearing	97.5 %	96.5 %
Slightly deaf	1.9 %	2.1 %
Very deaf	.5 %	1.4 %

Again, as was found with their eyesight, the girls have worse hearing than the boys. It is difficult to explain this, as adenoids, a fruitful source of deafness, are more common among boys than among girls.

Hearing is tested by means of forced whispering, the child standing at a distance of 20 feet with its eyes tightly closed. Slightly deaf children are those who can only hear at 10 feet distance, and very deaf are those who can only hear at 5 feet or less.

Children excluded from School.

Under Article 53 (b) the Medical Officer is empowered to exclude from school for as long as may be necessary, all children suffering from infectious or contagious disease, or who are in a dirty or verminous condition, or who are in such a state of health or suffering from mental or physical defects such as to prevent them deriving benefit from attendance at an elementary school. The following list shews the diseases from which children, who were excluded during 1914, were suffering. The list, however, includes both children examined at the routine inspection and those seen at the school clinic.

Children excluded from School under Article 53 (b), (Routine examination, Inspection Clinic, &c.)

Reason for Exclusion.	Number of Children.
Vermin (Hair)	33
„ (Body)	15
Impetigo	36
„ and Nits	4
Ringworm (Head)	10
„ (Body)	2
Itch	7
Eczema	4
Abscess	2
Phlyctenular Ophthalmia	20
Blepharitis	5
Pulmonary Tuberculosis	7
Bronchitis	2
Anæmia	2
Mumps	3
Scarlet Fever	7
Contacts	25
Miscellaneous	23

SECTION V.—Re-inspection, the work of the School Nurse & the Treatment of Defects.

Re-inspection.

As has already been stated, the scheme in force in the Borough provides for the re-examination of children previously found defective in about eight weeks time. In 1914 each school was re-inspected three times, but in the future there should be no difficulty in making the full number of re-examinations and re-inspecting the great majority of the defectives. It is only by persistently "following up" that satisfactory results will be obtained in so far as ensuring that every defective child has had every opportunity of receiving adequate treatment. The following table shews the results found on re-inspection at the different schools in the Borough.

TABLE SHOWING RESULTS FOUND ON RE-INSPECTION.

	NAME OF SCHOOL.										
	Throston	Prissick	St. Bega's R.C.	Hart Road	Middle- ton	St. Mary's R.C.	Galley's Field	Ann Crookes	Baltic Street	Church Close	TOTAL
Number of Cases re-inspected	96	7	23	50	13	15	97	25	32	89	447
Number of cases for which medical advice has been obtained	31	4	2	10	3	...	35	7	13	23	128
Number of cases where the defects have been remedied...	26	4	4	8	2	3	29	7	12	17	112
Number of cases showing satisfactory improvement ...	34	4	5	8	3	3	38	7	13	25	140
Number of cases showing no improvement ...	62	3	18	42	10	12	59	18	19	64	307

The work of the School Nurse.

During 1914 the work of the School Nurse has comprised :

1. Being present at the schools during routine inspection.
2. Attending at the Clinic at Baltic Street School every Tuesday and Friday morning, and in addition attending daily to see selected or neglected cases.
3. Carrying out at regular intervals head to head inspections in the girls' and infants' departments.

The following table shews the conditions found :—

	Girls examined.	Nits.	Per cent.	Vermin.	Per cent
January	1992	235	11	31	1'0
May	1970	210	10	30	1'5
September	1955	167	8'5	27	1'3

It is evident that there has been some slight improvement but with such wide intervals between examinations I have little doubt that there is ample opportunity for most cases to relapse. It is found that the same children are verminous at every examination, and apparently the homes would require attention also if permanent good is to be effected.

4. A tremendous amount of good work has been accomplished by Nurse Hayden in visiting absentees, *i.e.* children reported by the attendance officers as absent over 7 days without medical certificates. The figures given are :—

				Number
1st visits	...	...	...	864
Re-visits	...	...	...	1,074
				<hr/>
Total	...			1,938

Most of the re-visits were paid to children who were suffering from Impetigo and sore eyes, to ensure that the treatment ordered was being properly carried out. A great deal of bad attendance is caused by girls who have sores amongst their hair, following on verminous conditions. The nurse's visits are useful because she can examine the girls and insist on the hair being cut.

5. In addition 140 visits were paid to the homes of children who were found on re-inspection to be still without attention.

TABLE showing character of cases visited by School Nurse and the results obtained.

Disease or Defect.	Attended to.	No attention.	Left, address given.
Vision and Squint ...	20	38	11
External Eye Disease ...	—	1	2
Enlarged Tonsils ...	8	20	2
Adenoids ...	2	3	1
Vermin (head) ...	3	8	—
„ (body) ...	1	—	1
Impetigo ...	1	—	—
No boots ...	2	—	—
Neglect ...	4	2	1
Ear Disease and Hearing	2	3	—
Teeth ...	—	1	—
Pulmonary Tuberculosis	1	—	—
Infantile Paralysis ...	—	2	—
	44	78	18

Treatment of Defects.

The results obtained are fully set out in Table IV (Page 28). It is plain that much remains to be done, as owing to parental indifference, ignorance, apathy, and even incredulity there is a wide field for both the Medical Officer and the School Nurse to exercise tact and perseverance and fight the battle on behalf of these poor neglected children, as that is what it really comes to, battling with the parents to persuade them to give their children a fair chance.

SECTION VI.—Supplementary Work.

The only work falling to be recorded under this section is the examination of young people desirous of appointment as pupil teachers. One boy and seven girls were examined. Of these, two girls were found to have defective vision and requiring glasses, and one girl had defective vision and enlarged tonsils and required attention for both conditions.

The candidates otherwise were sound and in good health.

Section VII.—Deaths among School Children (5 to 15 years of age):

Pulmonary Tuberculosis	...	2
Acute Rheumatism	...	1
Pneumonia	...	1
Other Respiratory Diseases	...	1
Violent Deaths—Accident	3	
Bombardment	9	
		12
Other Defined Diseases ...	...	2
		19

As shown above, nearly 50 per cent of the deaths among School Children were the result of the bombardment by the Germans on the 16th December.

TABLE I.

Number of Children Inspected 1st January, 1914,
to 31st December, 1914.

A "Code."

Age	ENTRANTS.						LEAVERS.					Grand Total
	3	4	5	6	Other Ages	Total	12	13	14	Other Ages	Total	
Boys	30	110	160	28		328	371	31			402	730
Girls	19	83	171	29		302	386	39			425	727
Totals	49	193	331	57		630	757	70			827	1457

B. Groups other than Code.

	Intermediate Group (if any)	Special Cases	Re-examination (i.e. No. of Children examined)
Boys	103	19	201
Girls	120	26	246
Total	223	45	447

TABLE II, SHOWING THE PHYSICAL CONDITION OF CHILDREN INSPECTED.

CONDITION			Entrants				Leavers				Intermediate Group				Total				Special Cases		
			Boys	Girls	Total	Per cent	Boys	Girls	Total	Per cent	Boys	Girls	Total	Per cent	Boys	Girls	Total	Per cent	Boys	Girls	Total
TOTAL { B.—852 } INSPECTED { G.—873 } 1725			328	302	630	...	402	425	827	...	103	120	223	...	833	847	1680	...	19	26	45
CLOTHING—																					
Satisfactory			303	276	579	91.9	350	398	748	90.5	94	118	212	95	747	792	1539	91.5	12	23	35
Unsatisfactory			25	26	51	8.1	52	27	79	9.5	9	2	11	5	86	55	141	8.5	7	3	10
FOOTGEAR—																					
Satisfactory			299	275	574	91.2	347	394	741	89.7	92	115	207	93	738	784	1522	91.3	12	22	34
Unsatisfactory			29	27	56	8.8	55	31	86	10.3	11	5	16	7	95	63	158	8.7	7	4	11
CLEANLINESS OF HEAD—																					
Clean (no nits, etc.)			317	242	559	89.6	400	329	729	88.1	101	88	189	84.7	818	659	1477	87.4	19	10	29
Nits only			7	59	66	10.4	2	93	95	11.4	2	31	33	14.8	11	183	194	12.2	...	15	15
Pediculi			4	1	5	...	...	3	3	3	...	1	1	...	4	5	9	5	...	1	1
CLEANLINESS OF BODY—																					
Clean			304	280	584	92.8	351	388	739	89.3	89	113	202	90.7	744	781	1525	91	12	25	37
Dirty			17	17	32	5.3	46	35	81	9.7	11	5	16	7	74	57	131	7.6	6	1	7
Pediculi present			7	5	12	1.9	5	2	7	8	3	2	5	2.3	15	9	24	1.4	1	...	1
NUTRITION—																					
Excellent			22	19	41	6.5	9	4	13	1.5	...	3	3	1.4	31	26	57	3.1	...	...	...
Normal			236	232	468	74.4	306	358	664	80.6	70	90	160	71.7	612	680	1292	75.6	11	18	29
Below Normal			62	44	106	16.8	72	52	124	14.9	29	26	55	24.6	163	122	285	18.8	8	7	15
Bad			8	7	15	2.3	15	11	26	3.1	4	1	5	2.3	27	19	46	2.5	...	1	1
NOSE AND THROAT—																					
No Defect			282	278	560	88.8	361	364	725	87.6	80	100	180	80.7	723	742	1465	85.7	17	20	37
Mouth Breathers			20	5	25	3.9	11	10	21	2.4	7	7	14	6.2	38	22	60	4.1	2	3	5
Tonsils, Slight			13	9	22	3.4	14	17	31	3.7	11	9	20	8.9	38	35	73	5.3	1	...	1
„ Marked			12	10	22	3.4	15	34	49	5.9	5	6	11	4.9	32	50	82	4.7	...	3	3
Adenoids, Slight			8	...	8	1.2	3	4	7	8	5	3	8	3.5	16	7	23	1.6	...	...	...
„ Marked			8	...	8	1.2	...	2	2	...	...	2	2	...	8	4	12	7	2	1	3
EXTERNAL EYE DISEASE—																					
No Disease			325	295	620	98.4	400	420	820	99.1	102	115	217	97.3	827	830	1657	98.2	18	23	41
Blepharitis			1	5	6	...	...	3	3	3	1	2	3	1.4	2	10	12	7	1	2	3
Conjunctivitis ... ..			...	2	2	...	...	...	...	...	1	1	...	...	3	3	...	...	...	...
Corneal Opacities ... ..			...	...	...	...	2	1	3	3	...	2	2	...	2	3	5	2	...	1	1
Other Disease			2	...	2	...	...	1	1	...	...	...	...	...	2	1	3	...	...	...	...
EAR DISEASE—																					
No Disease			326	299	625	99.2	396	417	813	98.3	100	119	219	98.2	822	835	1657	98.2	19	26	45
Obstruction, R.			1	...	1	...	1	2	3	...	1	...	1	...	3	2	5	...	...	...	...
„ L.			1	...	1	...	2	2	4	...	1	...	1	...	4	2	6	...	...	...	...
Otorrhœa, R. ... ..			...	2	2	...	3	3	6	...	...	...	...	...	3	5	8	4	...	...	...
„ L. ... ..			...	...	...	...	2	4	6	...	1	1	2	...	3	5	8	4	...	...	...
Other Disease ... ..			...	1	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...
TEETH—																					
Sound			252	241	493	78.2	262	277	539	65.1	65	67	132	59.1	579	585	1164	67.5	11	13	24
Less than 4 decayed			60	47	107	16.9	123	130	253	30.5	34	47	81	36.3	217	224	441	27.9	7	10	17
Four or more „			16	13	29	4.6	17	16	33	3.9	4	6	10	4.6	37	35	72	3.3	1	2	3
Sepsis ... ..			...	1	1	...	...	2	2	...	...	...	...	...	3	3	...	...	...	1	1
HEART AND CIRCULATION—																					
No Disease			324	301	625	99.2	398	419	817	98.7	102	117	219	98.2	824	837	1661	98.7	19	25	44
Organic Disease			1	...	1	...	1	...	1	...	...	...	...	...	2	...	2	...	...	...	...
Functional „			2	...	1	3	...	2	2	...	...	1	1	...	2	3	5	...	...	...	...
Anæmia			1	1	2	3	3	4	7	8	1	2	3	1.4	5	7	12	7	...	1	1
Other Defect ... ..			...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
LUNGS—																					
No Disease			315	294	609	96.6	400	420	820	99.1	99	117	216	96.8	814	831	1645	97.5	19	25	44
Chronic Bronchitis, etc.			8	4	12	1.9	1	...	1	...	...	1	1	...	9	5	14	8	...	...	...
Tuberculosis			3	3	6	...	...	2	2	...	2</										



TABLE III.

Numerical Return of all Exceptional Children in area.

		Boys Girls Total		
BLIND (including partially Blind)		Attending Public Elementary Schools		
		Attending Certified Schools for the Blind		
		Not at School	1	1
DEAF AND DUMB (including partially Deaf)		Attending Public Elementary Schools	1	1
		Attending Certified Schools for the Deaf... ..	2	2
		Not at school	1	1
MENTALLY DEFECTIVE	Feeble Minded	Attending Public Elementary Schools	2	2
		Attending Certified Schools for mentally defective childr'n		
		Notified to the Local (Control) Authority during the year		
		Not at School	1	1
	Imbeciles	At School		
		Not at School... ..		
	Idiots			
PHYSICALLY DEFECTIVE	EPILEPTICS	Attending Public Elementary Schools		
		Attending Certified Schools for Epileptics		
		Not at school	1	1
	Pulmonary Tuberculosis	Attending Public Elementary Schools	1	1
		Attending Certified Schools for physically defective child'n		
		Not at school	2	4
	Other forms of Tuberculosis	Attending Public Elementary Schools	1	1
		Attending Certified Schools for physically defective child'n		
		Not at school	2	2
	Cripples other than Tuberculosis	Attending Public Elementary Schools		
		Attending Certified Schools for physically defective child'n		
		Not at school	2	4
	Dull or backward }	Retarded 2 years	5	6
		„ 3 years	11	

TABLE IV.—Treatment of Defects of Children during 1914.

Condition	No. of Defects found for which Treatment was considered necessary			Number of Defects for which no Report is available	No. of Defects treated	Results of Treatment.			No. of Defects not treated	Per-centage of Defects treated
	From previous year	New	Total			Remedied	Improved	Unchang'd		
Clothing ...	10	59	69	42	3	2	1	...	24	4.3
Footgear ...	13	34	47	33	5	4	1	...	10	10.6
Cleanliness of Head ...	24	92	116	56	20	16	4	...	40	17.2
Cleanliness of Body ...	5	25	30	14	9	7	2	...	7	30.0
Nutrition ...	1	24	25	14	3	1	2	...	8	12.0
Nose and Throat ...	15	82	97	32	10	10	...	...	55	10.3
External Eye Disease ...	6	22	28	18	5	...	5	...	5	10.7
Ear Disease ...	2	12	14	2	7	2	5	...	5	50.0
Teeth ...	3	40	43	20	11	7	4	...	12	25.5
Heart and Circulation ...	1	14	15	6	5	3	2	...	4	33.3
Lungs ..	2	25	27	8	4	2	2	...	15	14.7
Nervous System ...	...	3	3	...	...	...	...	...	3	...
Skin ...	2	31	33	16	4	4	...	...	13	12.1
Rickets ...	1	7	8	1	...	...	...	...	7	...
Deformities ...	1	5	6	1	...	...	...	...	5	...
Tuberculosis (non-pulmonary)	1	2	3	1	2	2	...	...	...	66.6
Speech ...	...	...	...	...	...	...	...	...	...	...
Mental Condition ...	...	...	...	...	...	...	...	...	...	...
Vision and Squint ...	12	200	212	72	50	50	...	...	90	24.0
Hearing...	...	8	8	2	2	2	...	...	4	25.0
Miscellaneous ...	4	...	4	4	...	...	...	...	...	...
TOTAL ...	103	685	788	341	140	112	28	...	307	17.7

INDEX.

	PAGE
Children examined	9, 26
,, excluded from School	21
Cost of Medical Inspection	11
Deaths among School Children	26
Exceptional Children	27
Facts disclosed by Medical Inspection :—	
Height and Weight	12
Clothing and Footgear	13
Cleanliness	13
Nutrition	14
Throat and Nose	16
External Eye Disease	16
Ear Disease	17
Teeth	17
Heart	17
Lungs	18
Nervous System	18
Skin	18
Rickets	18
Deformities	19
Non-Pulmonary Tuberculosis	19
Speech Defects	19
Mental Condition	20
Defective Vision and Squint	20
Hearing	21
General arrangements	6
Inspection Clinic	10
Parents present	7
Re-inspection	22
School Nurse	7, 24
Schools, number of	7
Tables I, II, III, IV	26, 27, 28
Teachers, Co-operation of	7
Treatment of Defects... ..	25, 28

